

NON-FERROUS SURGE BIASING COIL HAVING MULTIPLE  
PAIRS OF COILS POSITIONED AT ANGLES TO ONE ANOTHER

ABSTRACT

5           A surge suppression device includes a first and second  
coil positioned in close proximity to one another such that the  
windings of each coil are disposed at an angle thereto. In a  
preferred embodiment, the coils are disposed such that the  
windings of each coil are placed at a right angle (90 degrees)  
10   to one another. However, angles of varying degree can be  
employed. Varying configurations of the coil winding placement  
include a "sandwiched" type configuration, a "one on the top of  
the other" configuration as well as an intertwined  
configuration. Each embodiment employs additional surge  
15   elements such as metal oxide varistors (MOVs). It is  
unnecessary to employ any ferrous material core for any of the  
coils used in the novel device of the present invention.